PEDIATRICS

UNDER THE CHARGE OF

THOMPSON S. WESTCOTT, M.D., AND ALVIN E. SIEGEL, M.D.,

OF PHILADELPHIA.

A Case of Chorea Complicated by Gangrene of the Fingers.—CHODAK (*British Jour. Children's Dis.*, July–September, 1919) reports a case of a girl, aged twelve years, who was admitted to the hospital suffering with chorea of a week's duration, and with no history of an antecedent attack. Ten days later the right hand became white and the fingernails blue. In the course of a week gangrene of the finger tips and the ball of the thumb had definitely set in. The pallor spread up the arm.. There was no pulse at the wrist, but the brachial artery could be felt pulsating about half way down the arm. The pain became severe. Later the brachial pulse disappeared slowly from below upward and the brachial artery could be felt like a thick cord along the arm. The choreic movements subsided soon after the gangrene began. The gangrene began to fade early and was checked with some loss of function of the hand. There were three possible causes: embolism, arteritis leading to thrombosis, and arterial spasm. The writer inclines to the arteritis being the cause although he draws no absolute conclusion to that effect. There have been other cases of gangrene of the extremities following chorea reported in the literature.

Feeding Solids to Sucklings.—LOWENBURG (*New York Med. Jour.*, January 3, 1920) analyzes the records of 128 cases to ascertain at what ages solids were first given and to note the effect upon alimentary function and nutrition. Of these, 76 received solid food between the ages of six and eight months. He says that the food elements; protein, fat, carbohydrate, water and mineral salts exist in all foods in varying amounts. He sees no reason why these materials as they exist in the vegetable and animal kingdoms, as represented in other foods than milk, when properly prepared, may not be administered to sucklings. Thorough cooking and fine mechanical subdivision provide the means whereby foods other than milk may be made acceptable to the digestive apparatus of the infant. Babies under one year bear well a mixed diet containing comminuted solids. The best age at which to commence their use is probably at six months, although further clinical experience will probably demonstrate that it can be accomplished earlier. This has already been noted in malnutrition in either bottle or breast-fed babies. Even in very young infants of from two to three months an immediate gain occurs following the use of gradually increasing amounts of well-cooked cereals such as farina, cream of wheat, cornmeal mush and the like. The total elimination of milk, a twenty-four to thirty-six-hour hunger period, the use of a saccharated weak tea, followed by the use of the least fermentable carbohydrates (starches), and finely comminuted solids, constitute the correct treatment for diarrhea. Alkalies such as calcium carbonate and fuller's earth are useful additions in that they check fermentation, favor putrefaction, and are excellent thickening agents. More important than the influence on weight, are the beneficent results noted with reference to mental and physical development and vigor, the increase of tissue tone, and the prevention of rickets and scurvy.

A Study of Achondroplasia.—Wheeldon (*Am. Jour. Dis. Children,* January, 1920) reports 6 cases, which he places in two groups. Three cases comprise the first group, in which the symptoms of dwarf growth were more prominent. In the second group are 2 cases, which showed the symptoms of infolding. The sixth case showed symptoms falling under both classifications. The 2 cases of the second group have a feature, which has never been described before, no mention of it being found in the literature. Each of these cases showed an arcuate kyphos with a point of greatest convexity. In 1 case it was in the dorsal region while in the other it was in the dorsolumbar. Roentgen ray showed a wedge-shaped vertebra at the point of greatest convexity. No disease of the spine could be found, so that the author took the stand that this peculiar vertebra was the result of Jansen's "amniopressure." The same force which presses on the two ends of the spine producing the kyphos might also very easily produce the wedge-shaped vertebra. Two cases of the first group had in addition to the ordinary symptoms of achondroplasia, certain bony changes which could be shown in the roentgen ray. The author believes that these changes are similar to those described by Ehrenfield. The name achondroplasia was chosen for this condition because the state is an aplasia of chondrium. It is characterized by symptoms of dwarf growth such as shortening of the extremities, vertebral column and chest and looseness of the skin, and also by symptoms of infolding, such as kyphosis base os cranii, sagittal narrowing of the foramen magnum, depression of the nasal bridge, narrowing of the choanæ, reduction in the size of the sella turcica with consequent reduction in size of the pituitary body, and changes in the spine. The changes are probably due to the smallness of the amnion except in rare cases. The pathologic changes consist mainly in a retardation of ossification of the epiphysis and diminished production of endochondral bone, while the periosteum produces a comparatively normal amount. These changes of achondroplasia are produced between the third and eighth weeks of intra-uterine life. Besides the deformities of the bone, the characteristic roentgenologic appearance of a long bone under examination shows that near the epiphyseal ends the diaphyses become cup-shaped producing a T-shaped outline without any disturbance of the epiphyseal line or zone of proliferation, though these may be uneven and take on more or less fantastic shapes as compared with those of a normal individual. All of the cases presented in this paper bear out all that has been said and in addition two of them show a new symptom, a wedge-shaped vertebra, which falls in the symptoms of infolding and fortifies the belief that the state of achondroplasia is produced by the smallness of the amnion.

Calcium Metabolism of Infants and Young Children, and the Relation of Calcium in the Stools to Fat Excretion.—Holt, Courtney and Fales (*Am. Jour. Dis. Children,* March, 1920), in this, their second